

### Research Update -- May 23, 2019

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- Difficulties With Emotion Regulation in the Contemporary U.S. Armed Forces: Structural Contributors and Potential Solutions.
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- Links of Interest
- Resource of the Week: DOD's Proposal to Reduce Military Medical End Strength (Congressional Research Service)

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https://www.tandfonline.com/doi/full/10.1080/08995605.2019.1598227

### Initial job analysis of military embedded behavioral health services: Tasks and essential competencies.

Alan D. Ogle, J. Brian Rutland, Anna Fedotova, Chad Morrow, Richard Barker & LaQuanya Mason-Coyner

Military Psychology Published online: 16 May 2019 DOI: 10.1080/08995605.2019.1598227

Utilization of mental health personnel assigned to operational military units is an area of growth for the US military. What activities they perform, how requirements may differ from working in clinical settings, and how to select and train for these types of positions is still poorly understood. A job analysis was conducted of Air Force mental health providers and enlisted technicians embedded in special operations, intelligence, and high-risk training units. Participants rated 27 tasks on frequency, importance, difficulty, and risks, as well as the importance of 37 knowledge, skills, and abilities (KSAs), with differentiation between KSAs that may be trained versus those that must be present to be assigned to the embedded position. Tasks reflected 4 areas of activity: unit embedding/engagement, behavioral health consultation and support, performance optimization activities, and operational mission tasks. Tasks varied by professional training (psychologist, social worker, enlisted technician) and unit type. The KSAs rated as most important were ethical judgment and ability to manage complex relationships and boundaries while working outside of a clinic, strong interpersonal skills with appropriate assertiveness to advocate for safe, effective courses of action, and understanding of unit missions and organizational dynamics. Results have implications for job design, selection criteria, professional disciplines with KSAs necessary to unitspecific tasks, and training of personnel for integrated operational support positions.

https://www.sciencedirect.com/science/article/abs/pii/S0005789419300498

## When to Change the Treatment Plan: An Analysis of Diminishing Returns in VA Patients undergoing PE and CPT.

Rebecca K. Sripada, David J. Ready, Dara Ganoczy, Millie C. Astin, Sheila A.M. Rauch

Behavior Therapy Available online 18 May 2019 https://doi.org/10.1016/j.beth.2019.05.003

Highlights

- We investigated prevalence and predictors of meaningful PTSD change in VA care
- 14% of veterans achieved meaningful change within 8 sessions and 10% subsequently
- Those without some symptom reduction by session 8 are at high risk for nonresponse

### Abstract

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Evidence-based treatments for posttraumatic stress disorder (PTSD) often produce significant symptom reduction within eight sessions. However, some patients take longer to respond and a better understanding of predictors of later response can help guide treatment. In the current study, the cohort consisted of all VA patients with a PTSD diagnosis who received at least eight sessions of documented evidenced-based treatment within a six-month period in FY16-FY17 and had at least two PTSD symptom assessments. We examined the proportion of patients who achieved meaningful change (defined as at least 50% reduction in self-reported PTSD symptoms), both within the first eight sessions and subsequently. Fourteen percent of patients achieved meaningful change within eight sessions and 10% subsequently. Symptom change within the first eight sessions was highly predictive of subsequent change. Those who experienced at least 20% symptom reduction by session eight were twice as likely to subsequently achieve meaningful change as compared with all patients who continued treatment. Patients receiving service-connected disability compensation were less likely and White patients more likely to achieve meaningful change. Without some degree of symptom reduction by session eight, patients are unlikely to achieve meaningful change if treatment is not enhanced or changed.

https://journals.sagepub.com/doi/abs/10.1177/0095327X19848018

### Difficulties With Emotion Regulation in the Contemporary U.S. Armed Forces: Structural Contributors and Potential Solutions.

Elizabeth A. Stanley, Kelsey L. Larsen

Armed Forces & Society First Published May 14, 2019 https://doi.org/10.1177/0095327X19848018

The ability to regulate negative emotions is especially necessary for service members in the contemporary U.S. armed forces, since they routinely face situations that elicit negative emotions while executing their professional roles. Yet difficulties with regulating emotions, which are associated with stress and mood disorders, suicidality, and impairments in work performance, remain prevalent across this group. This article surveys research in five domains—recruitment and selection effects, military cultural pressures and coping strategies, training, common chronic stressors, and the contemporary operational environment—to highlight structural contributors to the heavy stress loads that U.S. service members often bear, which may contribute to their difficulty with emotion regulation (ER). It concludes with several recommendations that the military could implement to mitigate service members' stress loads and facilitate ER. Enhancing their ER skills may offer a long-term strategy to improve their resilience and performance.

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https://onlinelibrary.wiley.com/doi/full/10.1111/jmft.12384

Trait Mindfulness and Anger in the Family: A Dyadic Analysis of Male Service Members and their Female Partners.

Na Zhang, Timothy F. Piehler, Abigail H. Gewirtz, Osnat Zamir, James J. Snyder

Journal of Marital and Family Therapy First published: 13 May 2019 https://doi.org/10.1111/jmft.12384

Anger-related problems have been documented among post-deployed service members who returned home, posing risks to their well-being and increasing distress in their

families. Trait mindfulness (acting with awareness, nonjudging, and nonreactivity) has been associated with lower self-reported anger. Using actor–partner interdependence models, we tested the association between trait mindfulness and parental anger observed in parent–child and couple interactions. The sample consisted of 155 dyads of male National Guard/Reserve members who had been recently deployed and returned, and their female non-deployed partners. Results showed that fathers' and mothers' nonreactivity was negatively associated with their own observed anger, indicating that parents who reported higher nonreactivity exhibited lower anger. Mothers' nonreactivity was also negatively associated with observed fathers' anger in the same family such that fathers exhibited lower anger when their female partner reported higher nonreactivity. Nonreactivity facilitates emotion regulation and its cultivation may reduce anger in post-deployed military families.

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https://academic.oup.com/milmed/advance-articleabstract/doi/10.1093/milmed/usz111/5489540

### An Exploratory Analysis of Self-Reported Protective Factors against Self-Harm in an Enrolled Veteran General Mental Health Population.

Alicia K Williamson, Rachel P Riendeau, Kelly Stolzmann, Allie F Silverman, Bo Kim, Christopher J Miller, Samantha L Connolly, Jeffery Pitcock, Mark S Bauer

Military Medicine Published: 15 May 2019 https://doi.org/10.1093/milmed/usz111

### Introduction

The purpose of this study is to characterize self-reported protective factors against suicide or self-harm within free-response comments from a harm-risk screening.

### Materials and Methods

Veterans enrolled in Department of Veterans Affairs mental health care were administered a self-harm and suicide screening as part of the baseline assessment in an ongoing implementation trial. Veterans indicated if they had thoughts of harming themselves and if so, what kept them from acting on them. Responses were coded based on established Centers for Disease Control protective factor categories. Descriptive analyses of demographic factors (such as age, gender, and race), clinical factors, and quality of life measures were conducted across groups depending on levels of self-harm risk.

### Results

Of 593 Veterans, 57 (10%) screened positive for active thoughts of self-harm or suicide. Those with thoughts of self-harm had lower quality of life scores and higher rates of depression diagnoses. Of those individuals, 41 (72%) reported protective factors including Personal Resources (17%), Community Resources or Relationships (68%), and Other including pets and hobbies (15%). Those with stated protective factors had higher rates of employment and lower rates of PTSD diagnoses.

### Conclusion

This is one of the first open-response studies of harm-risk protective factors, allowing for a patient-centered approach that prioritizes the individual's voice and values. New protective factors emerged through the open-response format, indicating important factors that kept Veterans safe from self-harm or suicide such as pets and hobbies. Increasing focus on strengths and positive aspects of Veterans' lives that serve as protective factors may ultimately improve mental health treatment and prevention of suicide and self-harm.

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https://www.tandfonline.com/doi/abs/10.1080/13811118.2019.1612804?journalCode=us ui20

## Near Term Suicide Risk Assessment: A Commentary on the Clinical Relevance of Protective Factors.

Alan L. Berman & Morton M. Silverman

Archives of Suicide Research 13 May 2019 https://doi.org/10.1080/13811118.2019.1612804

In this paper we examine the clinical relevance of protective factors to the assessment and formulation of near-term risk of death by suicide. Contrary to current clinical belief and practice we posit that there is no evidence-base to support these factors as mitigating or buffering risk for suicide for the individual patient, especially in the nearterm assessment of that suicide risk. We show that evidence-based protective factors derive from population-based studies and, applicably, have relevance to public health promotion/primary prevention and are significant in informing treatment/secondary prevention; but lack evidence to support their often-proposed role in mitigating or buffering risk for suicide on an individual basis, especially when applied to the assessment of near-term risk of suicide. Accordingly, we argue for the need for empirical study of the role protective factors may or may not play in the formulation of a patient's risk for suicide and, in the interim, for clinical caution in assuming that protective factors have any significant buffering effect on a patient's level of near-term risk.

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### https://www.ncbi.nlm.nih.gov/pubmed/31106808

Sleep. 2019 May 18. pii: zsz112. doi: 10.1093/sleep/zsz112. [Epub ahead of print]

# The Association of Insomnia and Sleep Apnea with Deployment and Combat Exposure in the Entire Population of US Army Soldiers from 1997-2011: A Retrospective Cohort Investigation.

Caldwell JA, Knapik JJ, Shing TL, Kardouni JR, Lieberman HR

Since 2001, the United States (US) has been engaged in the longest and most expensive overseas conflict in its history. Sleep disorders, especially insomnia and obstructive sleep apnea (OSA), are common in service members, and appear related to deployment and combat exposure, but this has not been systematically examined. Therefore, the incidence of clinically-diagnosed insomnia and OSA from 1997 to 2011 in the entire population of US Army soldiers was determined and associations of these disorders with deployment and combat exposure examined. This observational retrospective cohort study linked medical, demographic, deployment, and combat casualty data from all active duty US Army soldiers serving from 1997-2011 (n = 1,357,150). The mediating effects of multiple known comorbid conditions were considered. From 2003 to 2011, there were extraordinary increases in incidence of insomnia (652%) and OSA (600%). Factors increasing insomnia risk were deployment (risk ratio [RR] [deployed/not deployed] = 2.06; 95% confidence interval [CI], 2.04-2.08) and combat exposure (RR [exposed/not exposed] = 1.20; 95% CI, 1.19-1.22). Risk of OSA was increased by deployment (RR [deployed/not deployed] = 2.14; 95% CI, 2.11-2.17), but not combat exposure (RR [exposed/not exposed] = 1.00; 95% CI, 0.98-1.02). These relationships remained after accounting for other factors in multivariable analyses. A number of comorbid medical conditions such as posttraumatic stress disorder and traumatic brain injury mediated a portion of the association between the

sleep disorders and deployment. It is essential to determine underlying mechanisms responsible for these very large increases in insomnia and OSA and introduce effective preventive measures.

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### https://www.ncbi.nlm.nih.gov/pubmed/30027449

Soc Psychiatry Psychiatr Epidemiol. 2019 Feb;54(2):145-156. doi: 10.1007/s00127-018-1562-6. Epub 2018 Jul 19

## Contribution of traumatic deployment experiences to the burden of mental health problems in Canadian Armed Forces personnel: exploration of population attributable fractions.

Born JA, Zamorski MA

#### PURPOSE:

Mental health problems are prevalent after combat; they are also common in its absence. Estimates of deployment-attributability vary. This paper quantifies the contribution of different subtypes of occupational trauma to post-deployment mental health problems.

### METHODS:

Participants were a cohort of 16,193 Canadian personnel undergoing post-deployment mental health screening after return from the mission in Afghanistan. The screening questionnaire assessed post-traumatic stress disorder, depression, panic disorder, generalized anxiety disorder, and exposure to 30 potentially traumatic deployment experiences. Logistic regression estimated adjusted population attributable fractions (PAFs) for deployment-related trauma, which was treated as count variables divided into several subtypes of experiences based on earlier factor analytic work.

### **RESULTS**:

The overall PAF for overall deployment-related trauma exposure was 57.5% (95% confidence interval 44.1, 67.7) for the aggregate outcome of any of the four assessed problems. Substantial PAFs were seen even at lower levels of exposure. Among subtypes of trauma, exposure to a dangerous environment (e.g., receiving small arms fire) and to the dead and injured (e.g., handling or uncovering human remains) had the

largest PAFs. Active combat (e.g., calling in fire on the enemy) did not have a significant PAF.

### CONCLUSIONS:

Military deployments involving exposure to a dangerous environment or to the dead or injured will have substantial impacts on mental health in military personnel and others exposed to similar occupational trauma. Potential explanations for divergent findings in the literature on the extent to which deployment-related trauma contributes to the burden of mental disorders are discussed.

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https://www.sciencedirect.com/science/article/abs/pii/S0005796719300865

## The online treatment of suicidal ideation: A randomised controlled trial of an unguided web-based intervention.

Eva De Jaegere, Renate van Landschoot, Kees van Heeringen, Bregje A.J. van Spijker, ... Gwendolyn Portzky

Behaviour Research and Therapy Available online 16 May 2019 https://doi.org/10.1016/j.brat.2019.05.003

Highlights

- Online self-help therapy for suicidal ideation was compared to a waitlist condition.
- Participants in both groups experienced severe suicidal ideation or depressive symptoms.
- Online self-help therapy reduced suicidal ideation. .
- Improvements were found on suicide-related symptoms in the therapy condition.
- Attrition rate was high, in particular in the therapy condition.

### Abstract

Suicide is a major public health issue, and treatment of suicidal thoughts may contribute to its prevention. Provision of online treatment of suicidal ideation may reduce barriers that suicidal individuals experience in face-to-face treatment. We therefore aimed at evaluating the effectiveness of a web-based intervention targeting a reduction of suicidal ideation. We carried out a two-arm, parallel-design, randomised controlled trial in the general population in Flanders (Belgium) (registered as NCT03209544). Participants who were 18 years or older and experienced suicidal ideation were

included. The intervention group (n = 365) received access to the unguided web-based intervention, and the control group (n = 359) was placed on a waitlist. Assessments were carried out at baseline and at 6 and 12 weeks. Participants reported high levels of suicidal ideation, depression, hopelessness, worrying, and anxiety at baseline. Compared to the control group, participants in the intervention group experienced a significant decline in suicidal ideation, depression, hopelessness, worrying, and anxiety both at post-test and at follow-up. An important limitation of the study was a high dropout rate, in particular in the intervention group. Our findings suggest that the online self-help intervention was more effective in reducing suicidal ideation and suicide-related symptoms than a waitlist control in a severely affected population. It can help in filling the gap between crisis help and face-to-face treatment.

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### Links of Interest

West Point to graduate record number of African American women <u>https://www.washingtonexaminer.com/news/west-point-to-graduate-record-number-of-african-american-women</u>

Navy Child Care Waitlist for On-Base Services is 9,000 Kids Long https://news.usni.org/2019/05/16/navy-child-care-waitlist-for-on-base-services-is-9000kids-long

Lawmakers Blast Military Personnel Chiefs over Shortage of On-Base Child Care <u>https://www.military.com/daily-news/2019/05/17/lawmakers-blast-military-personnel-chiefs-over-shortage-base-child-care.html</u>

The Air Force just gave working spouses a boost for PCS moves <u>https://www.airforcetimes.com/news/your-air-force/2019/05/17/the-air-force-just-gave-working-spouses-a-boost-for-pcs-moves/</u>

Taking Depression Seriously: A treatment overview <u>https://scopeblog.stanford.edu/2019/05/16/taking-depression-seriously-a-treatment-overview/</u>

Sleeping in Doesn't Mitigate Metabolic Changes Linked to Sleep Deficit https://jamanetwork.com/journals/jama/fullarticle/2734052?guestAccessKey=32fbc745b836-48f3-ab2a-c17f4e2474f7 Younger troops would be barred from buying tobacco products under new plan <u>https://www.militarytimes.com/news/pentagon-congress/2019/05/20/younger-troops-would-be-barred-from-buying-tobacco-products-under-new-plan/</u>

Troop Divorce Rate Continues Slow But Steady Decline https://www.military.com/daily-news/2019/05/20/troop-divorce-rate-continues-slowsteady-decline.html

Minnesota National Guard takes look at itself, makes changes after 12 soldier suicides <u>https://kstp.com/news/minnesota-national-guard-looks-itself-changes-12-soldier-suicides-/5360618/</u>

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### Resource of the Week: DOD's Proposal to Reduce Military Medical End Strength

New, from the Congressional Research Service:

In accordance with 10 U.S.C. §115, Congress annually authorizes the end strength for active duty and reserve component personnel. End strength is the maximum number of personnel permitted in each military service (e.g., Army, Marine Corps, Navy, Air Force) as of September 30, the last day of the fiscal year. For fiscal year (FY) 2019, Congress authorized a total end strength of 1,338,100 active duty personnel and 824,700 reserve component personnel, including subtotals by force. Each military service then decides how to organize, train, and equip the people who compose its authorized end strength in order to meet combatant commander or service-specific requirements.

This decision includes determining the number of military medical personnel required in each service. The size of each service's medical force is often dependent on total end strength levels authorized by Congress, demands for medical capabilities in military operations, and the priority of those demands compared to other nonmedical capabilities. As major combat operations decreased over the past decade, DOD gradually reduced the active duty military medical end strength at an average annual rate of 1% (815 personnel). However, for FY2020, DOD proposes to reduce its active duty medical force by 13% (14,707 personnel).

	FY2019 (estimated)	FY2020 (proposed)	Proposed Change (#)	Proposed Change (%)
Army	44,643	37,550	-7,093	-16%
Navy	39,600	36,764	-2,836	-7%
Air Force	31,911	27,133	-4,778	-15%
Total	116,154	101,447	-14,707	-13%

Table 1. Active Duty Medical Force, FY2019 vs. FY2020

Source: Department of Defense (DOD), "Defense Health Program Fiscal Year (FY) 2020 Budget Estimates," March 2019; DOD, "Defense Health Program Fiscal Year (FY) 2019 Budget Estimates," February 2018.

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